

Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

1 1 (Original). A wavelength division multiplexing transmission system in
2 which a plurality of remote apparatuses are connected to a station
3 apparatus and communication is performed among said remote apparatuses
4 and the station apparatus, wherein each of said remote apparatuses
5 comprises wavelength determining means that determines an available
6 wavelength on the basis of an optical signal received from said station
7 apparatus.

1 2 (Currently Amended). The wavelength division multiplexing
2 transmission system according to claim 1, wherein said wavelength
3 determining means determines the wavelength of an unreceived optical
4 signal among the wavelength classification used with said transmission
5 system as the available wavelength and sets the wavelength as a
6 transmission and reception wavelength to be used in said remote apparatus.

1 3 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein said wavelength determining means
3 determines the wavelength of a received optical signal as the available
4 wavelength and sets the wavelength as a transmission and reception
5 wavelength to be used in said remote apparatus.

1 4 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein said station apparatus comprises optical
3 output control means that determines a wavelength to be used, on the basis
4 of an optical signal received from said remote apparatus.

1 5 (Currently Amended). The wavelength division multiplexing
2 transmission system according to claim 1, wherein said station apparatus
3 prevents an optical signal having the same wavelength as an unreceived
4 wavelength among the wavelength classification used with said
5 transmission system from being outputted and outputting and optical signal
6 having the same wavelength as a received wavelength.

1 6 (Currently Amended). The wavelength division multiplexing
2 transmission system according to claim 1, wherein said wavelength
3 determining means comprises:
4 wavelength filtering means that sequentially separates optical
5 signals from an optical signal including a plurality of wavelengths;
6 optical receiving means that outputs a reception status signal
7 indicating whether or not said separated optical signal is being received;
8 wavelength control means that determines an unused wavelength
9 among the wavelength classification used with said transmission system on
10 the basis of said reception status signal, sets said unused wavelength as a
11 transmission and reception signal, and outputs a wavelength control signal
12 for setting said wavelength; and
13 optical transmitting means whose output wavelength is adjusted to
14 be said unused wavelength in response to said wavelength control signal.

1 7 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein said station apparatus comprises:
3 wavelength demultiplexing means that demultiplexes the
4 wavelength of a received optical signal;
5 optical receiving means that receives an optical signal
6 demultiplexed by said wavelength demultiplexing means;
7 optical output control means that determines, as a transmission
8 wavelength, an optical signal having the same wavelength as that of an
9 optical signal received by said optical receiving means;
10 optical transmitting means that transmits an optical signal having

11 the transmission wavelength determined by said optical output control
12 means; and
13 wavelength multiplexing means that multiplexes the wavelength of
14 the optical signal transmitted by said optical transmitting means.

1 8 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein each of said remote apparatuses and said
3 station apparatus are connected with each other through optical branching
4 and coupling means.

1 9 (Original). The wavelength division multiplexing transmission system
2 according to claim 8, wherein said optical branching and coupling means is
3 an optical coupler.

1 10 (Original). The wavelength division multiplexing transmission system
2 according to claim 8, wherein said optical branching and coupling means is
3 wavelength demultiplexing and multiplexing means.

1 11 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein said plurality of remote apparatuses and said
3 station apparatus are connected in a star topology.

1 12 (Original). The wavelength division multiplexing transmission system
2 according to claim 1, wherein said plurality of remote apparatuses and said
3 station apparatus are connected in a tree topology.

1 13 (Original). A remote apparatus in a wavelength division multiplexing
2 transmission system in which a plurality of remote apparatuses are
3 connected to a station apparatus and communication is performed among
4 said remote apparatuses and the station apparatus, said remote apparatus
5 comprising wavelength determining means that determines wavelength
6 determining means that determines an available wavelength on the basis of

7 an optical signal received from said station apparatus.

1 14 (Currently Amended). The remote apparatus according to claim 13,
2 wherein said wavelength determining means determines the wavelength of
3 an unreceived optical signal among the wavelength classification used with
4 said transmission system as the available wavelength and sets the
5 wavelength as a transmission and reception wavelength.

1 15 (Original). The remote apparatus according to claim 13, wherein said
2 wavelength determining means determines the wavelength of a received
3 optical signal as the available wavelength and sets the wavelength as a
4 transmission and reception wavelength.

1 16 (Currently Amended). The remote apparatus according to claim 13,
2 wherein said wavelength determining means comprises:
3 wavelength separating means that sequentially separates optical
4 signals from an optical signal including a plurality of wavelengths;
5 optical receiving means that outputs a reception status signal
6 indicating whether or not said separated optical signal is being received;
7 wavelength control means that determines an unused wavelength
8 among the wavelength classification used with said transmission system on
9 the basis of said reception status signal, sets said unused wavelength as a
10 transmission and reception signal, and outputs a wavelength control signal
11 for setting said wavelength; and
12 optical transmitting means whose output wavelength is adjusted to
13 be said unused wavelength in response to said wavelength control signal.

1 17 (Original). A station apparatus in a wavelength division multiplexing
2 transmission system in which a plurality of remote apparatuses are
3 connected to the station apparatus and communication is performed among
4 said remote apparatuses and the station apparatus, said station apparatus
5 comprising optical output control means that determines a wavelength to

6 be used, on the basis of an optical signal received from said remote
7 apparatus.

1 18 (Currently Amended). The station apparatus according to claim 17,
2 wherein said station apparatus prevents an optical signal having the same
3 wavelength as an unreceived wavelength among the wavelength
4 classification used with said transmission system from being outputted and
5 outputting and optical signal having the same wavelength as a received
6 wavelength.

1 19 (Original). The station apparatus according to claim 17, comprising:
2 wavelength demultiplexing means that demultiplexes the
3 wavelength of a received optical signal;
4 optical receiving means that receives an optical signal
5 demultiplexed by said wavelength demultiplexing means;
6 optical output control means that determines, as a transmission
7 wavelength, an optical signal having the same wavelength as that of an
8 optical signal received by said optical receiving means;
9 optical transmitting means that transmits an optical signal having
10 the transmission wavelength determined by said optical output control
11 means; and
12 wavelength multiplexing means that multiplexes the wavelength of
13 the optical signal transmitted by said optical transmitting means.

1 20 (Original). A method for adding a remote apparatus to a wavelength
2 division multiplexing transmission system in which a plurality of remote
3 apparatuses are connected to the station apparatus and communication is
4 performed among said remote apparatuses and the station apparatus,
5 wherein an available wavelength is determined on the basis of an optical
6 signal received at a remote apparatus to be added and the wavelength is set
7 as a transmission and reception wavelength to be used in said remote
8 apparatus to be added.